IN THE CLAIMS:

The following listing of claims replaces all prior versions and listings of the claims in this application:

Listing of claims:

1. (*Previously presented*) A disk playback device comprising a calculation processing circuit for determining an optimum value of offset for an error signal based on an amplitude value of the error signal in accordance with focus deviation or tracking deviation of an optical head or an amplitude value of an output signal of the optical head, and making an offset adjustment based on the optimum offset value, the calculation processing circuit approximating to a quadratic curve the relationship between offset values and the amplitude values in signal reproduction, and repeating calculation of the optimum offset values based on the quadratic curve, and comprising:

calculation processing means for approximating to a quadratic curve the relationship between the offset values and the amplitude values with reference to three different offset values and three amplitude values at the respective offset values, and calculating an offset value corresponding to the peak of the quadratic curve as the optimum offset value, and

value setting means for setting the three different offset values: a first offset value; a second offset value smaller than the first offset value and having an amplitude value smaller than an amplitude value at the first offset value by a predetermined value or more; a third offset value greater

than the first offset value and having an amplitude value smaller than an amplitude value at the first offset value by a predetermined value or more, and setting the three amplitude values respectively at three amplitude values at the first to third offset values,

the value setting means setting the first offset value at an optimum offset value obtained in a previous optimum offset value calculation processing, and setting the second and third offset values respectively at second and third offset values set in a previous optimum offset value calculation processing,

wherein a maximum of three amplitude values of a maximum of three different offset values need to be measured to determine the optimum offset value and the determination of said second and said third offset values does no require the determination of amplitude values of at least five different offset values.

2. (*Previously presented*) A disk playback device according to claim **1**, wherein the calculation processing circuit comprises:

first checking means for checking whether an amplitude value at the previous second offset value is smaller than an amplitude value at the previous optimum offset value by a predetermined value or more,

second checking means for checking whether an amplitude value at the previous third offset value is smaller than an amplitude value at the previous optimum offset value by a predetermined value or more, the value setting means comprising:

second offset value setting means for retrieving an offset value having an amplitude value smaller than the amplitude value at the previous optimum offset value by a predetermined value or more when the amplitude value at the previous second offset value is not found to be smaller than the amplitude value at the previous optimum offset value by a predetermined value or more, and setting a second offset value at the retrieved offset value, and

third offset value setting means for retrieving an offset value having an amplitude value smaller than the amplitude value at the previous optimum offset value by a predetermined value or more when the amplitude value at the previous third offset value is not found to be smaller than the amplitude value at the previous optimum offset value by a predetermined value or more, and setting a third offset value at the retrieved offset value.

3. (*Previously presented*) A disk playback device according to **claim 1 or claim 2** wherein the disk playback device comprises temperature detection means for detecting a temperature of the disk, and the calculation processing circuit calculates the optimum offset value every time the disk is varied in temperature by a predetermined temperature value.